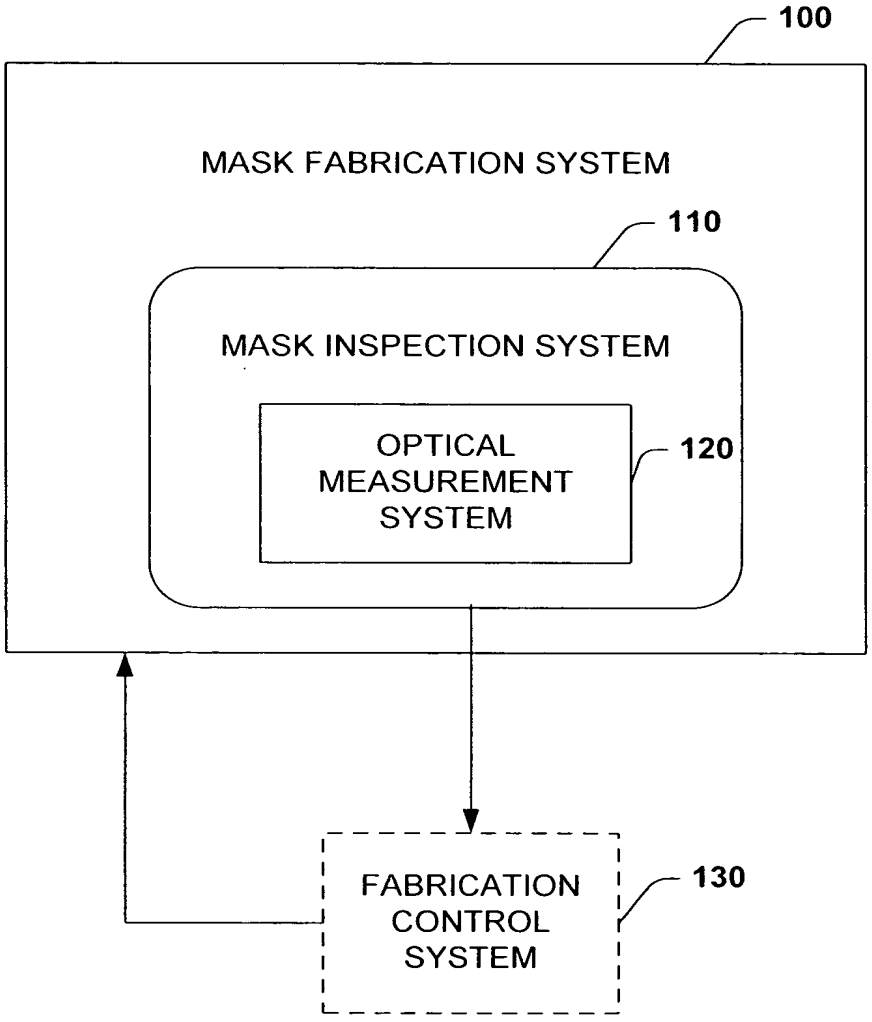
100
MASK FABRICATION SYSTEM
110
MASK INSPECTION SYSTEM
OPTICAL MEASUREMENT SYSTEM
120
FABRICATION CONTROL SYSTEM
130

FIG. 1

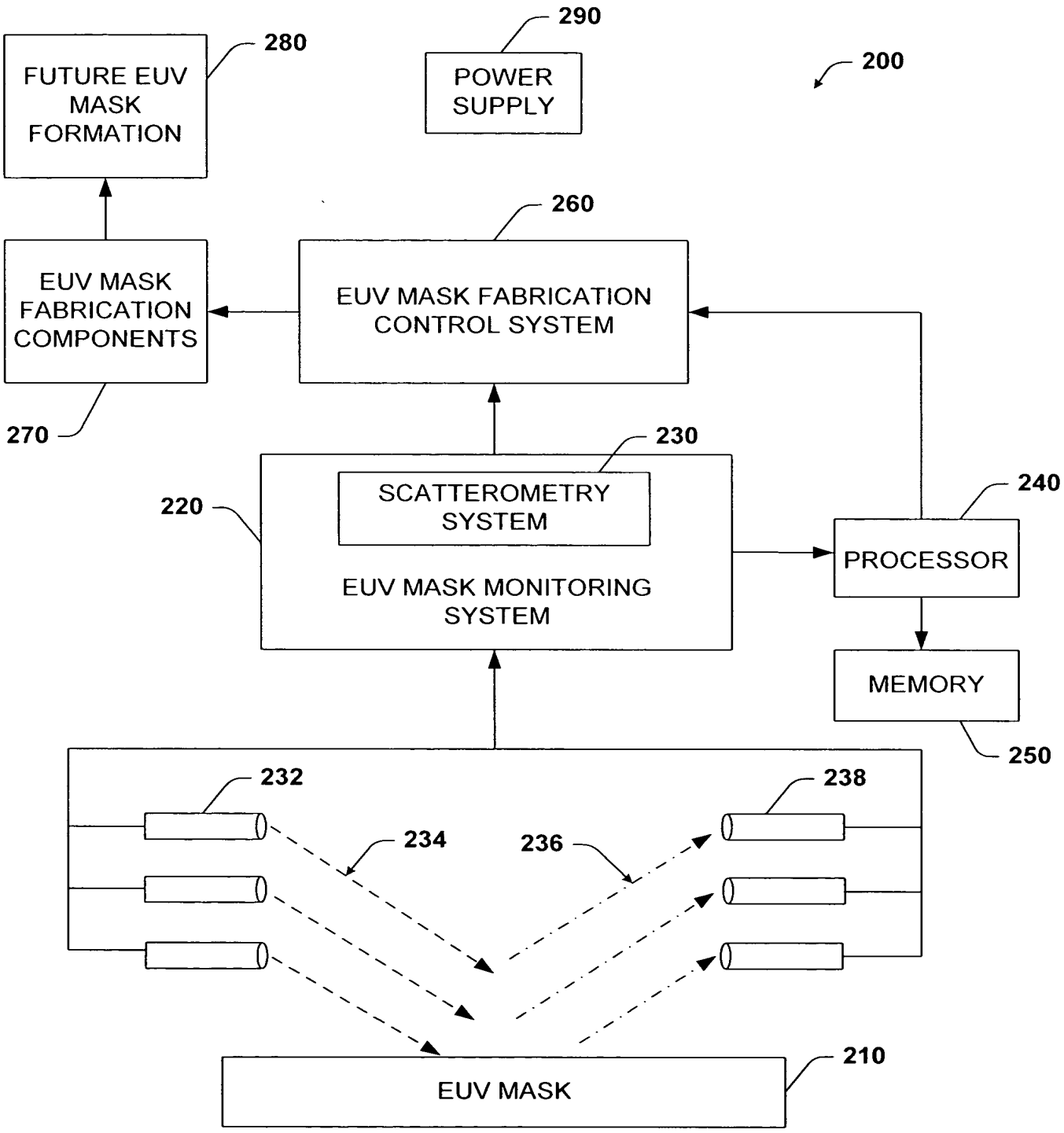
FUTURE EUV MASK FORMATION
280
POWER SUPPLY
290
200
EUV MASK FABRICATION COMPONENTS
270
EUV MASK FABRICATION CONTROL SYSTEM
260
220
SCATTEROMETRY SYSTEM
230
EUV MASK MONITORING SYSTEM
PROCESSOR
240
MEMORY
250
232
234
236
238
EUV MASK
210

FIG. 2

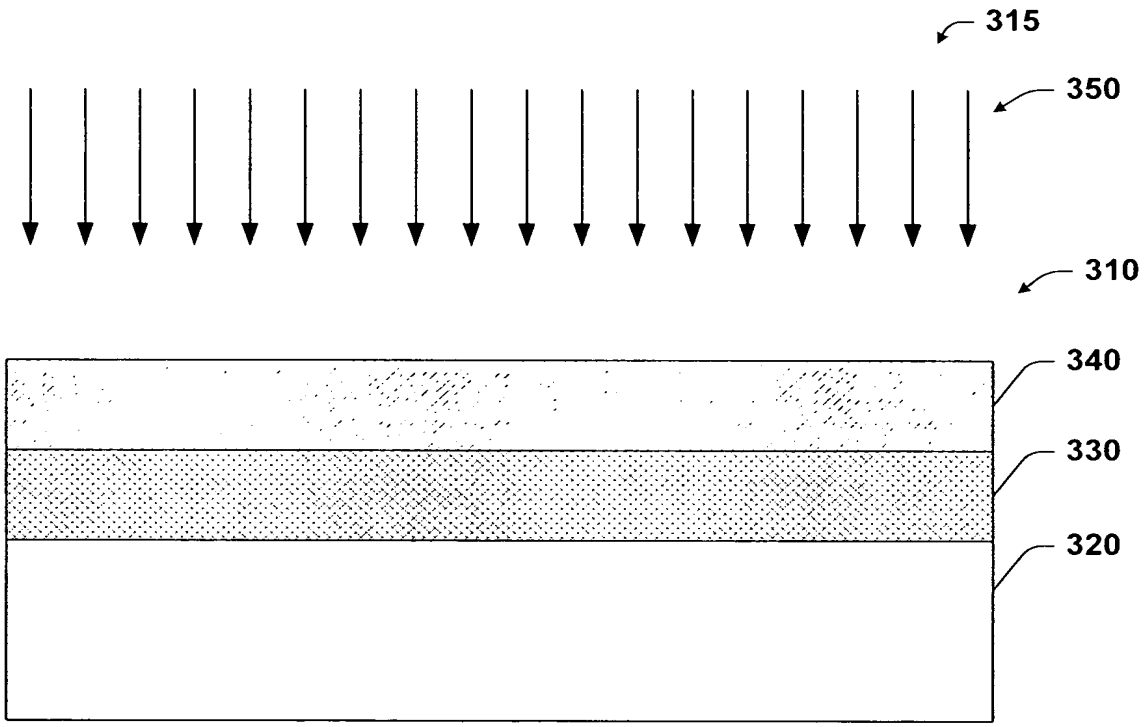

FIG. 3

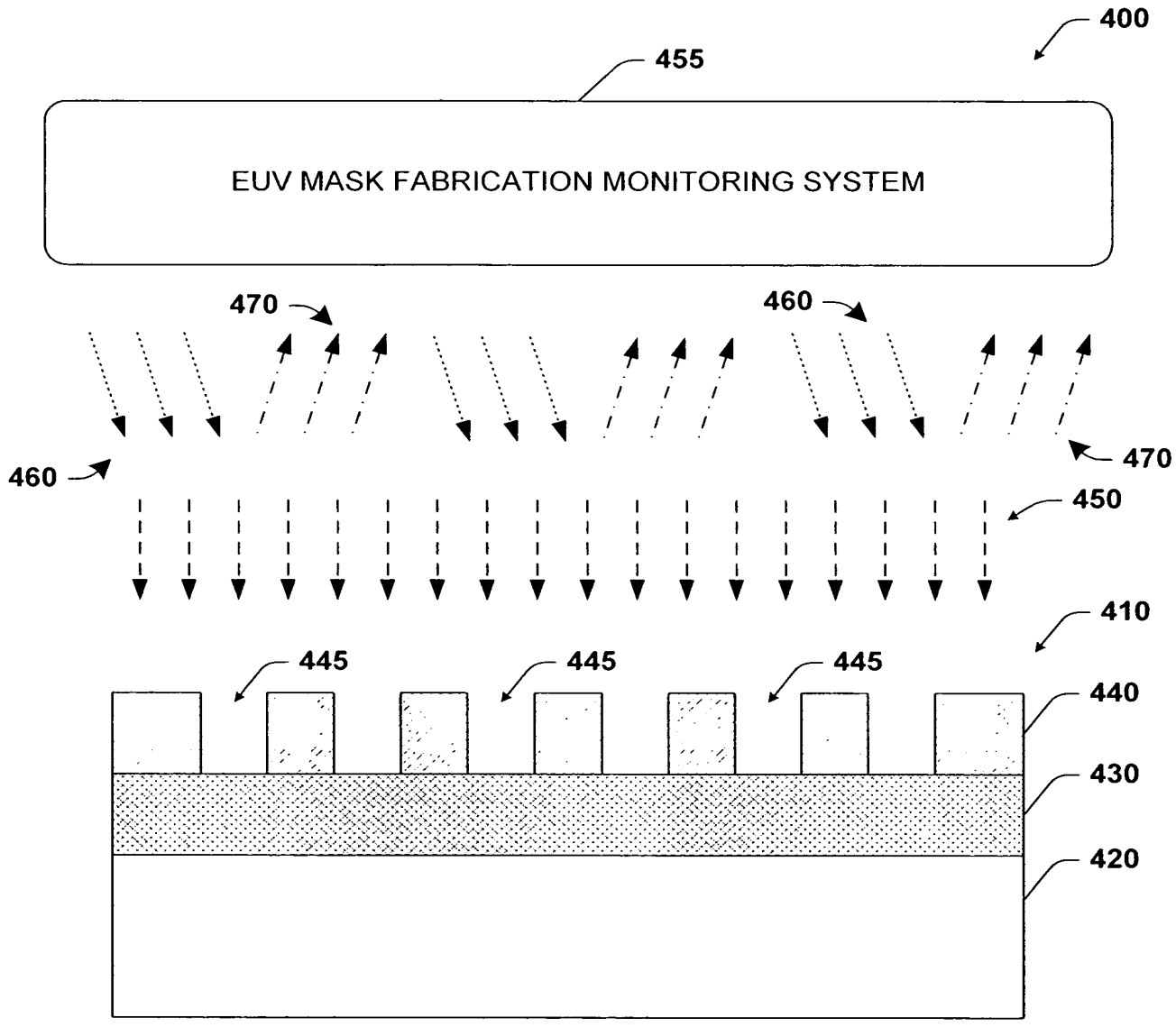
400
455
EUV MASK FABRICATION MONITORING SYSTEM
470
460
460
470
450
410
445
445
445
440
430
420

FIG. 4

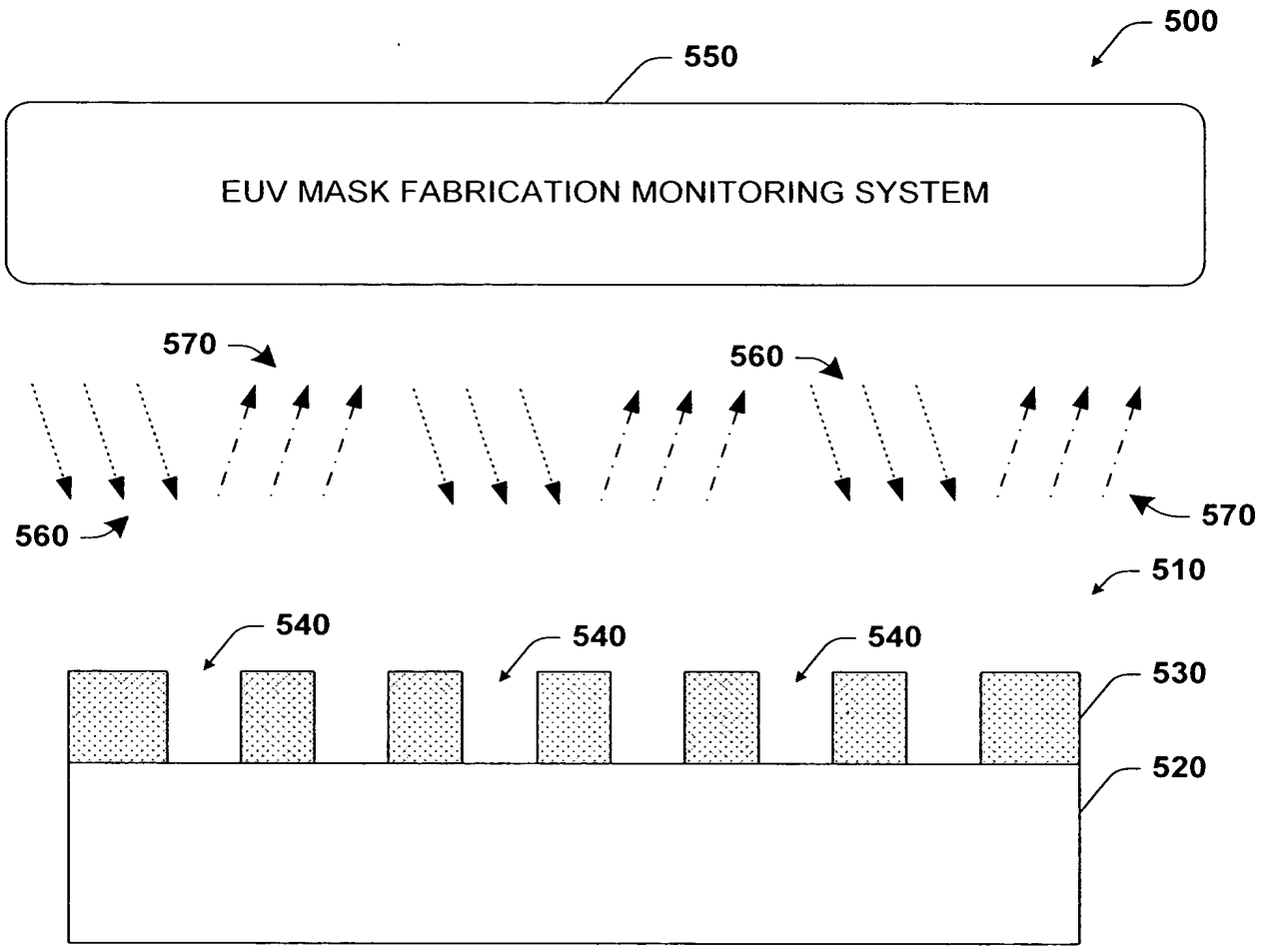
500
550
EUV MASK FABRICATION MONITORING SYSTEM
570
560
560
570
510
540
540
540
530
520

FIG. 5

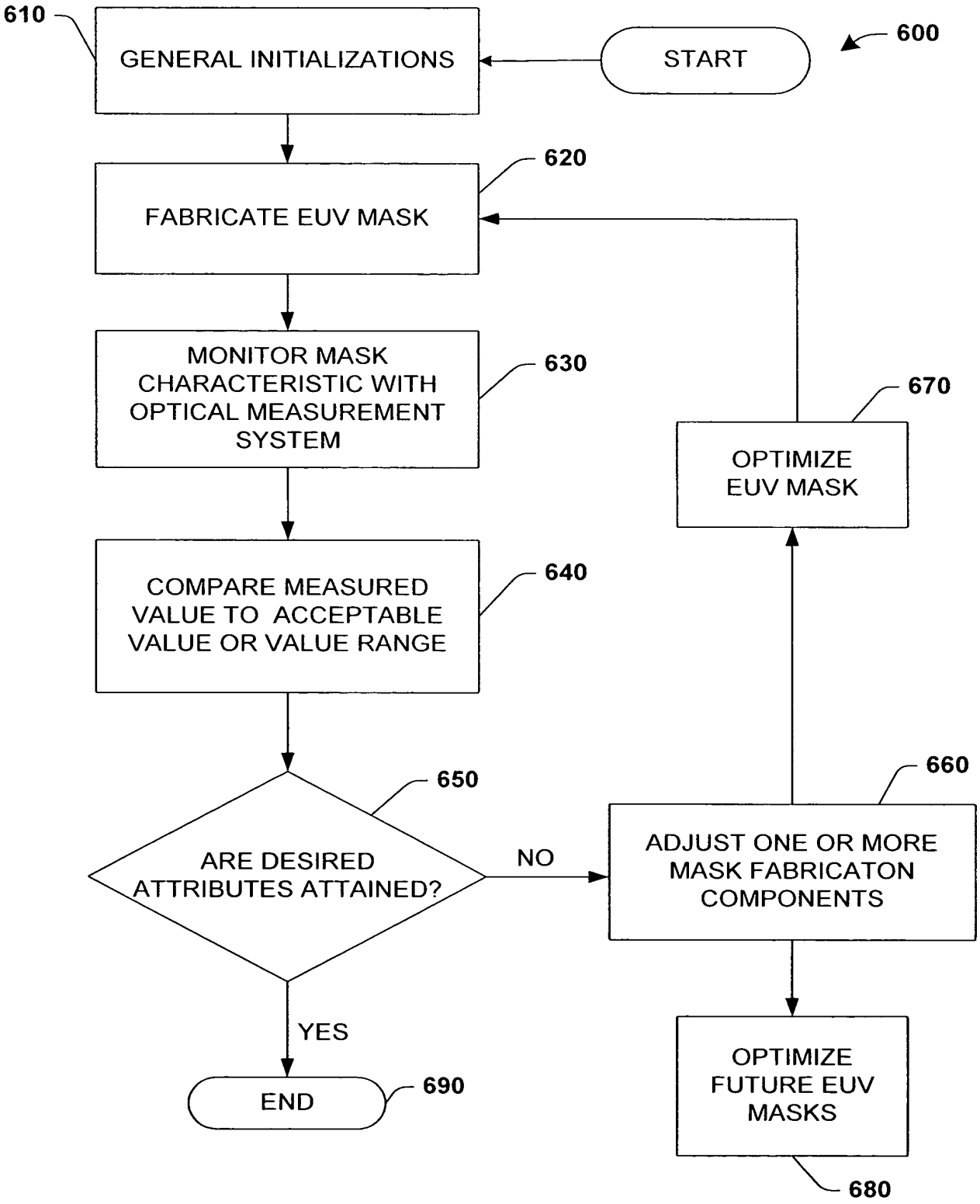
610
GENERAL INITIALIZATIONS
START
600
620
FABRICATE EUV MASK
MONITOR MASK CHARACTERISTIC WITH OPTICAL MEASUREMENT SYSTEM
630
670
OPTIMIZE EUV MASK
COMPARE MEASURED VALUE TO ACCEPTABLE VALUE OR VALUE RANGE
640
650
ARE DESIRED ATTRIBUTES ATTAINED?
NO
660
ADJUST ONE OR MORE MASK FABRICATON COMPONENTS
YES
END
690
OPTIMIZE FUTURE EUV MASKS
680

FIG. 6